CITY OF FORT LAUDERDALE
PUBLIC SERVICES – ENGINEERING DIVISION
CADD SPECIFICATIONS FOR PROJECT DRAWINGS

April. 2004

CITY OF FORT LAUDERDALE

This Document was prepared in the City of Fort Lauderdale Engineering Division by the CADD Standards Committee

Table of Contents

Purpose

1. The Engineering division provides engineering, architectural, landscaping and project management services; and has put together a set of drafting standards to be used in all computer-aided drawings. The intent is to standardize the way electronic drawing files are produced and to make all drawing files regardless of who produced them, familiar in look and content to all the production staff in the division.

2. Consultants are encouraged to familiarize themselves with recent existing City project files prior to commencing a project for the City of Fort Lauderdale, in order to achieve true conformity with the way drawing files are to be produced. Below are some of the criteria, which must be followed. This document may not cover all circumstances; therefore it is up to the consultant to secure the pertinent information to any situation that may arise in a particular case that is not covered here. The City of Fort Lauderdale's Engineering Division reserves the right to direct a consultant as to the desired manner to proceed when a situation is not addressed here.

3. All drawings shall be produced in AutoCAD using version 2002. Drawing files submitted will be 100% AutoCAD DWG format and 100% editable, but at the consultant's discretion, may be submitted in an un-editable media like CD-ROM.

4. The subsequent applies to 2D drawings only. Prior to producing any drawings from 3D modeling software the project manager shall consult with the City's CADD coordinator.

Version

5. The current version of AutoCAD at the time these standards are revised is AutoCAD 2002. These standards can only address those issues pertaining to that version of AutoCAD. If a new version of AutoCAD is released prior to revising these standards, projects shall still be submitted in AutoCAD 2002. If a consultant wishes to submit drawing files in the newer release, then there may be additional conditions required depending on what the new release of AutoCAD may introduce.
All drawing files in a project shall be saved in the same version of AutoCAD.

Scales

6. All drawing plan-views and horizontal scale of profiles and cross-sections will be drawn in scale 1 : 1, and drawing accuracy shall be 0.01' or better. That is, on a 'DIST' inquiry between consecutive 100-foot stations on a baseline, the result should be 100.00'.

7. In engineering projects, details will be drawn 1:1 and then scaled in a paperspace window. Certain details need to be drawn with a different horizontal and vertical scales for clarity (e.g. typical roadway cross-section); here all horizontal work must be proportional to itself and vertical work must be proportional to itself. In architectural projects all details will be drawn to scale (1:1). There are however very few instances where it is not practical to draw details to any scale, like electrical panels; for those instances only, a scale will not be required.

8. Drawings for projects will be plotted at a scale commonly used by the engineering/architectural profession; (e.g. 1" = 20', 1" = 30', 1/4"= 1', etc). Following are examples of unacceptable scales: 1" = 27', 1"=70', etc.

9. Vertical scale for cross-sections and profiles will be drawn to a scale in the same ratio as the final plotted product.
i.e. if the final plot is horizontal 1"= 20', and the vertical 1"= 2', then the vertical scale is 10 times that of the horizontal so it will be drawn 10 times larger than 1 : 1.

10. The practice of drawing at a scale different to 1 : 1, then making a block with the parts and inserting the block to represent a 1 : 1 scale will be not be permitted, and such work is unacceptable.

11. Drawing files that are not scale relevant, like index sheet, notes and schedules, shall fill the scale attribute box with the notation "N/A". The notation "NTS" or "NOT TO SCALE" shall be left to those drawing files that

are scalable, but are shown in a scale not measurable with a typical engineering or architectural scale, like details, schematics, etc.

X-REFS.

12. Projects shall make use of Xrefs to segregate the different disciplines and sub-consultants or design teams involved. Survey information shall be in its own files (see base drawing). In engineering projects, all civil work (demolition, concrete, asphalt, pavers) may be placed in: 1 file per discipline or per consultant or per building (if project is multi building), or at the discretion of the project manager may be further segregated into several files. Underground utilities (if more than 1 in a project) may be placed in a single file, or each in its own. At no time shall there be more than 1 consultant's work into a single Xref file. Example: no design shall be placed directly on a survey file, or electrical design on an architectural file, etc. In underground utilities where there will be a profile included, the area to be profiled will be drawn in 1 continuous profile and preferably included in the same xref as the plan view for the profiled area. Architectural projects shall also be segregated by specialty. All xrefs shall share the base footprint xref'd in. Electrical, mechanical, foundation, plumbing, roof, etc shall be either each be in its own xref file or grouped by sub-consultant or design group at the discretion of the project manager.

13. X-ref files shall have "soft" paths. Project drawing files, which contain x-refs with "hard" paths, will not be accepted. Consultants will have to strip all "hard" paths from x-refs, or initially x-ref with "soft" paths.

14. X-Ref files shall be limited to one per discipline. Larger projects that involve multiple buildings and/or sites may make use of more than 1 xref per discipline upon approval of xref list by the city. Details, general notes, logos, etc. SHALL not be x-refed. If during the course of a project design a consultant decides to make use of x-ref for anything other than background support, the final product shall not contain Xrefs and layer names with x-ref file name prefixes will not be accepted.

15. If an x-ref is "bound" (binded) it shall be "insert"xref and not "bind"xref. That way no extraneous layer names are created.

16. Profiles shall be drawn as a contiguous entity and in the same file as the plan view is located. Under no circumstance a profile will be drawn in pieces and/or in the final sheets. All entities of a profile shall remain together in the same file. Line work, grid, all text, notes, leaders, etc. shall be all together.

17. Within each discipline, all entities shall be drawn in the same file: line work, text, notes, dimensions, leaders, ETC. shall all be placed in the same file and space (MODELSPACE).

Base Drawing

18. Topographical surveys in AutoCAD format shall not be cut or disseminated into several files in order to create individual sheets.

19. Topographic survey files shall not have parts deleted just because the proposed project does not cover those portions. In that case open a *paperspace* window that will show just the portion of survey needed or use XCLIP.

20. Topographic surveys SHALL NOT BE MOVED SPATIALLY within the drawing file, nor shall the consultant or city staff, change the coordinate system to anything other than what was received from survey, UNDER ANY CIRCUMSTANCE. If a consultant furnished the survey it shall be in 'WCS' and the survey shall have the north towards the top of the screen.

21. Files of topographic survey shall only have topographic information. These files shall be xref'd into a new file where the proposed project will be designed.

22. The base topographical survey file shall be produced in several files, xrefed, one within the other. This will make possible to make adjustments to some aspects of the file without the possibility of making changes to the more critical parts of the survey. The following paragraph is a description of what each file holds and a procedural explanation on how to create such a file. It is not intended directly to the designer, but to the survey personnel responsible for creating the survey base file.

The base survey shall be made of 3 base files:
#####SURV.DWG,
#####BSLN.DWG,
#####TOPO.DWG

The "#'s" are place-holders for the project number.
If utility markings are gathered at a later date from the original survey, then this information can be placed in another file which shall be named "#####UTIL.DWG"

The #####SURV.DWG" file shall be the main file and the others shall be XREFED into it.

SAMPLESURV.DWG
SAMPLEBSLN.DWG
SAMPLETOPO.DWG
SAMPLEUTIL.DWG

23. In projects that use a base drawing other than a survey, like an architectural project of plant facility, all disciplines shall make use of a common base drawing, inserted as an xref. If there is an update then it is simple to update drawings from all disciplines. No design group shall take the base drawing and modify it in any manner. Through the use of xreferencing, all permitted changes (layer color, linetype, etc) can be accomplished.

Units

24. Units:
Engineering projects will use decimal as linear units at all times, angular units will be surveyor (bearings) units. Angles to be measured counter-clockwise and 0 will be to the east.
Architectural projects will use architectural units.

25. Dimensions shall be with a scale factor of 1, a precision of 0.01’ for decimal units and 1/8” for architectural units, with the default value displayed. The scale factor may be changed to 12 or 1/12 when integrating engineering and architectural linework; example site plans, or architectural details displayed in an engineering drawing with decimal units. The scale factor can also be changed to 1/10 in profiles that are drawn 10 times larger vertically than horizontally.

26. Architectural drawings will have a 1” grid, and entities snap to the grid.

Cover Sheets and Title Blocks

27. Consultants shall use the City's title block/sheet border symbol. Consultants shall not make any modifications to the city’s title block, including renaming the block.

28. All projects shall have a cover sheet. For the cover sheet, consultants shall use the City’s cover sheet symbol. Consultants shall not make any modifications to the city’s cover sheet, including renaming the block. At present the city has a cover sheet for engineering projects, another for architectural or landscape projects another for airport projects (FXE) and another for the Water/Sewer (Waterworks2011)program. The cover sheet shall be inserted at an XYZ scale of 1; that way it will be plotted with a final size of 24X36 at scale 1:1, in PAPERSPACE.

29. When the standard title block/sheet border is inserted in “paper space”, it shall be inserted at an XYZ scale of 1. Then the viewports can be zoomed at the appropriate XP scale, to produce the desired final scale within the viewport, (*several scales in various viewports are then possible*) and that way it will be plotted with a final size of 24X36 at scale 1:1.

30. All projects will be made to plot in a standard 24" x 36" sheet. The City's standard title block/sheet border SHALL NOT be inserted with dissimilar 'x' and 'y' scales in order to plot in a final size other than the standard.

Symbols

31. Blocks will be issued with the most common symbols used in engineering projects. From time to time these symbols will be revised and/or new symbols will be added. If for any reason there is a need to create a block either for local use or to keep for future projects; the entities which form part of the block will be set to layer "0".
NO EXCEPTIONS ARE PERMITTED.

32. Standard issue symbols shall NOT be exploded, renamed or changed in any way. Exploded symbols shall not be misrepresented as have intentionally been drawn from scratch. That is to say objects that are repeated throughout and/or that are depicted in an exaggerated scale for clarity (fire hydrants, power poles, catch basins, street lamps, etc) shall be represented by a symbol. If a symbol CAN be used it SHALL be used.

33. Consultants (and City staff) shall make use of the City's standard engineering symbols, in all drawing files of City projects, whenever possible. If a consultant (or City staff) has a symbol or symbols they wish to use, for which the City has no substitute within the symbols' library, the consultant will provide the City with the proposed symbols, for the City's approval, prior to their use. The approved symbols will become part of the City's symbols' library for all future projects, royalty free.

34. North arrows, graphical scales, consultant’s logos, location maps and other similar symbols typically but not necessarily placed in final sheets, shall be inserted as blocks and left unexploded.

35. Consultants can insert their company logo or identification information in the form of a block (symbol) and left unexploded. This block can be placed in all sheets including the cover sheet within the drawing area of each sheet.

36. Dimensions shall be associative at all times and left at their default value, and shall NOT be exploded. Exploded dimensions shall not be “grouped” or blocked to appear to be unexploded.

37. Hatch patterns shall NOT be exploded. Exploded hatch patterns shall not be misrepresented as intended entities. If a hatch pattern CAN be used it SHALL be used. Hatch patterns shall not be “grouped” or blocked to appear to be unexploded.

Paperspace

38. Paper space shall be used for title block/sheet border and viewports. No other entities shall be placed there, especially notes that describe parts of

a project(notes with a leader);(exceptions: logos, captions, legends, general notes, etc.).

39. Title block/sheet borders or cover sheets shall NOT be x-ref'ed.

40. All drawing entities will be confined within the sheet border. Extents of the drawing files shall be to the edge of title block/sheet border. Multiple layouts are permitted, however only one sheet border per layout is allowed. In order to make use of multiple layouts it is essential that a new file naming convention be followed. See file naming further down.

Colors And Lineweights

41. The City will provide a list of colors and line weights to be used.

42. Drawing files submitted, shall make use of one of the city's templates, which have the "Layout" page setup, configured with the city's configuration files (PC3, CTB and PMP). The setup shall not be reconfigured for differently named files.

43. Currently there are 2 different lineweights charts used in engineering, depending on the project. For projects, which are strictly engineering (water, sewer, force main, etc) there is one; for architectural projects and for landscaping projects there is a second one. If the architectural title block and architectural cover sheet are used then the architectural lineweight list (ARCH.CTB) shall be used; if the engineering title block and engineering cover sheet are used then the engineering lineweight list (ENG.CTB) shall be used.

44. All entities shall be located in their appropriate layer, and have a color and linetype "BYLAYER". Certain features, due to their size, can be of a different color, for clarity; blocks of fire hydrants and valves can be made in a specific color to override the color (line thickness) of layers designated for proposed features.

45. Colors are not fixed to layers; they are dependent on the discipline. When entities for a particular discipline need to be displayed in drawing files for other disciplines, colors will need to be setup differently in order for features to stand out.
E.g. Survey drawings will show survey features solid and stand-out. The same survey features will look dimmed in landscape drawings.

46. The project manager shall be the final judge of the plotted appearance of the drawings. Consultant shall furnish a printed copy of all drawing files using one of the City's lineweight chart files for color approval by the City.

47. There are certain features which make use of custom linetypes, and that rely on the linetype to be identified. If the linetype is changed, then the feature looses its identity. Examples are fences: they can make use of a custom linetype that identifies them. These entities can be placed in a layer with a different linetype and the identity of the fence is preserved. For these cases, it is permissible to make these entities non-bylayer. There are other examples in electrical drawings.

Fonts

48. Since fonts are not carried with the drawing files and depend on the computer that is running AutoCAD to find and use these font files, the only fonts to be used are those that come with AutoCAD out of the box. No third party or proprietary fonts shall be used.
Drawing files shall not make use of SHAPE files.
Architectural projects may use some third party fonts. Those consultants that are engaged in an architectural project shall coordinate with the City's project representative to verify the fonts permitted.

49. It is possible to automatically substitute fonts not found in the AutoCAD path. The City may (at their discretion) substitute odd fonts with ROMANS.SHX.

Layers

50. The City will provide a list of layer names to be used. If there is a project for which there are no layer names (which pertain to that discipline), the consultant shall provide a list of proposed layer names based on the layer guidelines, for the City's approval, prior to their use. Once approved by the City, those layer names will become part of the City's list of layer names for all projects thereon or until revised.

51. At present there are layer names for engineering, architecture, landscape including irrigation, treatment plants, and FXE. The existing layer names should be sufficient for any City project of those disciplines. However if a consultant believes that additional layer names are needed, then a request must be made in writing to the City's engineering division, with the proposed layer names and the justification for them.

52. No other layer names, other than those in the City's layer name list, will be present in drawing files. Exceptions are those layer names automatically created by AutoCAD; "0", "DEFPOINTS", "ASHADE".

53. NOT ACCEPTED are layer names created by third party software or add-ons, including Autodesk add-ons.

54. Layer names with prefixes similar to those found in xref dependant layers shall not be permitted if those layers are not bound to an xref file. If the xref is to be bound ("bind"), the option which strips the prefix to the layer name shall be used ("insert" bind type). Note, this option is not possible from the command line. Dialog box command must be used. Verify with project manager before binding any xref.

55. All text, labels, Rtext, etc. that is placed in paperspace shall be in layers: [1]#-SHBD-TEXT and/or #-SHBD-NOTE; consultants' logo shall be placed in layer #-SHBD-LOGO; viewports shall be placed in layer: #-SHBD-VPRT; general linework in paperspace like lines to separate areas or viewports, etc. shall be placed in layer: #-SHBD. All general text shall be placed in a single layer, unless there is aa justification for the contrary; for instance if text is placed in a layer and the headings (different color) are placed in another. North arrows and graphic scales shall be placed in layer : #-SHBD-NARW. Leaders shall be placed in a "TEXT" or "NOTE" layer together with the accompanying text.

56. Layer names that duplicate the discipline and the major group shall not be used. Examples are: E-ELEC, D-DEMO, H-HVAC, I-INST, F-FIRE, Q-EQPM.

57. Details, sections elevations, do not in general need layer management. Since there is seldom layer manipulation (on, off), the minor group names that distinguish lineweight were created. The City uses the discipline, major group designating the object to draw (DETL, SECT, ELEV, etc) and then the minor group designating the lineweight. The minor group names are: XFIN, FINE, MEDM, HEVY AND XHEV.

General Issues Before Submittals

58. All drawing files shall be zoomed to EXTENTS, prior to any submittal to the City, whether it is the final or a working submittal; and purged of all unused layers and linetypes at the final submittal.

59. Consultants shall secure file number for the project and make sure that the appropriate information is completed in the title block. File numbers can be obtained from the Project Engineer.

60. Consultants shall fill in total number of sheets in the tile block, prior to final submittal of drawing files.

61. Consultants shall submit a hardcopy (bond, 24" x 36") and HPGL/2 plot files of the project drawings together with any submittal in electronic format (CD, ZIP disk, etc), when making partial and final submittal of drawing files. Prior to all submittals, consultants shall coordinate with the City's file room as to the method of creating plot files, which will make prints satisfactory to the City.

[1] # is a place-holder for the discipline letter.

File Names

62. All drawing files, shall conform to the City of Fort Lauderdale's File naming convention, as described in the following pages. The names shall be accurate to reflect the desired information as per the naming convention.

Miscellaneous

63. "MTEXT" (multiline text) shall be avoided for single line text, except when used with leaders. In this case it is encouraged. Mtext shall never be used on single word text.

64. These standards are a detailed description of aspects in the creation of drawing files within Engineering. It is by no means the complete description of all the methods used, and it is the consultant's responsibility to alert the City of any point or situation which is not described in these specifications, and which should be addressed. Also if a consultant, after reading these standards and prior to commencing any drafting work, feels that there are points or items in these standards which are not logical, or are onerous to abide by, they should notify the City's Engineering Division at their earliest convenience and their views will be open to discussion.

65. This document does not address layer colors, lineweights, font type and font size. The consultant shall coordinate with the city's project manager on how these items are to treated.

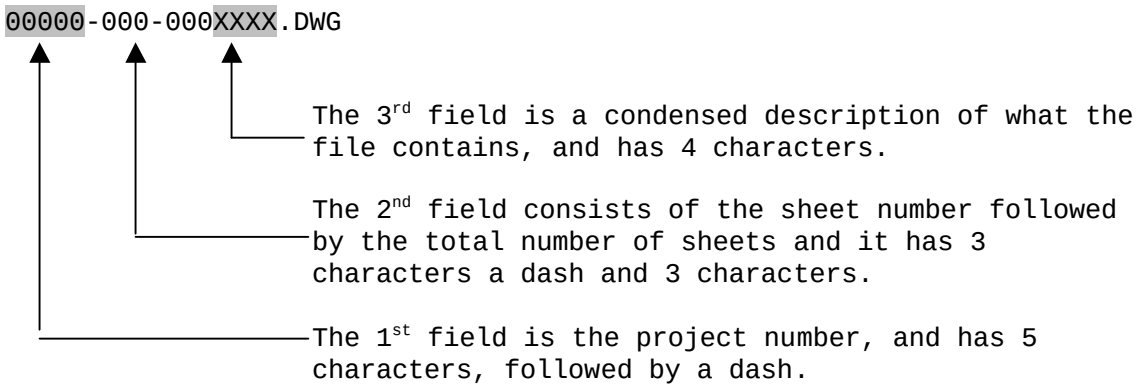
66. If the TRACE command is going to be used, then all of the resulting objects shall be converted into a single PLINE.

67. FOR PROVIDERS OF DRAFTING SERVICES:
The City will pay for time spent drafting only.
All coordination, research, travel, meetings, materials, supplies and any other extraneous costs, must be included as overhead and accounted for in the hourly drafting rate.

Drawing File Names

68.The City of Fort Lauderdale Engineering Division has adopted the following file naming convention for project drawing:

The format for single layout drawing files looks like this:



69. The first field represents the project number; it consists of 5 digits followed by a dash. It is possible for certain project numbers to have more than 5 characters.

70. The second field represents the sheet number and consists of 2 parts as illustrated above. The first part reflects the sheet number as shown in the title block, followed by a dash and the total number of sheets for the project plan set. If sheet numbers have dashes or dots, they will be stripped: example for C-11, use C11; for C1.01, use C101.

71. The third field is a 4-letter description of what the project drawing file depicts. There is a list of descriptions used in previous projects. Consultant shall check the list prior to creating a new description. The City will need to approve descriptions prior to their use.

72. This proposed 3-field format is only for files that contain final drawing with 1 title block/sheet border.

Examples for this naming format are the following:

09585-001-020WATR.DWG
10256-021-022SEWR.DWG
10855-M10-065HVAC.DWG
10325-A01-033PLAN.DWG
10325-E01-033LITE.DWG

73. X-ref files will have a slightly different format. It will have only 3 fields, and will look like this:

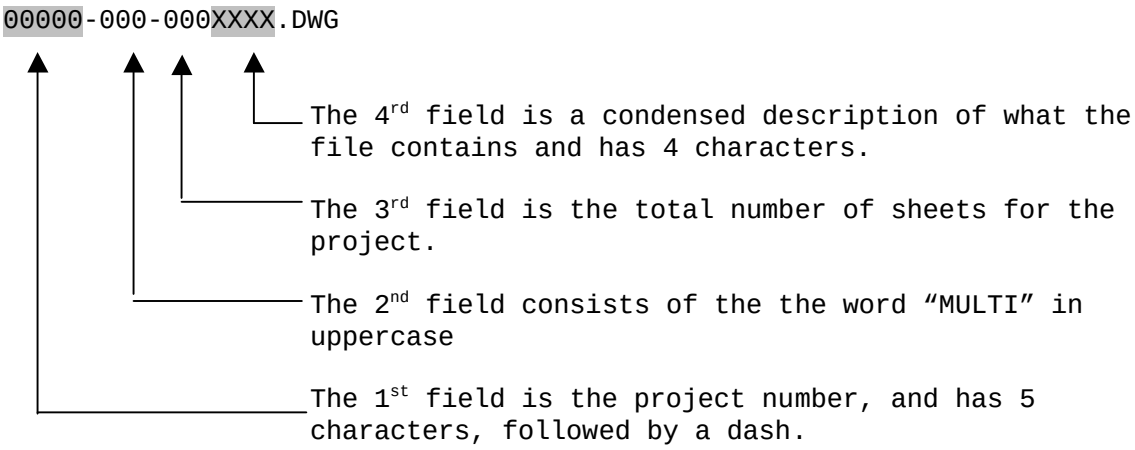
00000XREFXXXX.DWG

74. The 1st field (5 characters) will be the project number; the second field shall be the word "XREF". The third field shall be a 4-character description for the file or discipline found in the file. This convention is valid for all XREFS except for the survey XREFS. These shall remain as received by the survey department.

75. Sheets shall be numbered in a sequential manner and there shall not be any voids in the numbering for any given discipline.

Example: 1,2,3,4, or A01, A02, A03, BUT NEVER A01, A02, A05.

76. For drawing files that contain multiple layouts, the files shall be named as follows:



Examples for this naming format are the following:

XXXXX-MULTI-036DETL.DWG: detail sheets.
XXXXX-MULTI-013ELEC.DWG: Electrical sheets.

NOTE: PLOT FILES SHALL STILL BE NAMED FOLLOWING THE INSTRUCTIONS FOR SINGLE LAYOUT DRAWING FILES.

77. Layout Tab names shall be named with the sheet number and an optional description for the sheet content.

Possible names for sheet description to be used as the third field for file names:

BSRV	Boundary Surveys
COVR	Cover Sheets
DEMO	Demolition
DETL	Details.
EQPM	Equipment
GRAD	Paving and grading.
INST	Instrumentation.
IRRG	Irrigation.

KMAP	Key map.
LEGN	Legend, symbols and schedule sheets.
LITE	Lighting plans
MOTP	Maintenance of traffic plans
NAID	Navigational Aids.
NOTE	General Notes
PILE	Piles
PLAN	Plan and profile sheets.
PLNT	Plant material.
PLUM	Plumbing
POWR	Power
RISR	Riser diagrams.
RNWY	Runway
ROAD	Roadway projects incl. Widening, narrowing, special projs.
SECT	Cross Sections
SSWR	Sanitary sewer lines.
SGNL	Signalization.
SIGN	Sign project files.
SITE	Site plans.
STRM	Storm water (drainage)
STRP	Pavement Striping.
TSRV	Topographic Surveys
TXWY	Taxiway
WALK	Sidewalk project file (asphalt or concrete or other)
WATR	Potable water lines.

Layer Names

78. Layer names will follow guidelines as established by The Task Force on CAD Layer Guidelines and published by the American Institute of Architects in 1990, and revised in 1997.

79. The City of Fort Lauderdale Engineering Division adheres for the most part (but not totally) to the CAD Layer Guidelines and has adopted the long format; it has up to 16 alphanumeric characters, and is divided in fields or groups.

X-XXXX-XXXX-XXXX

Above is an example of the format, also known as the 1-4-4-4.

80. It is important to understand that all layer names used MUST adhere to this format. The first field is one (1) character long and defines the discipline code. The remaining groups or fields are 4 characters long each and are separated by a hyphen. The third group is 4 characters long and is called the minor group and it serves to subdivide the second. A fourth group may be required at times to accommodate special project requirements, and it also is 4 characters long.

NOTE: The engineer or technician working on the project must determine what color to use from the “LINE WEIGHTS AND GREY SCALE CHART” supplied by the City, in order to get the desired effect, and the City will give the final approval.

81. The list of layer names used in all City of Fort Lauderdale projects is a separate document in the form of a MS Excel spreadsheet.

Engineering Line Widths and Colors

Color No.	Description	Pen No.	Pen Width
1	Red	7	.018
2	Yellow	7	.025
3	Green	252	.012
4	Cyan	252	.012
5	Blue	7	.015
6	Magenta	7	.020
7	White	7	.015
8	Dark gray	253	.010
9	Light Gray	7	.010
10		7	.010
11		7	.010
12		7	.010
13		7	.010
14		7	.010
15		7	.010
21		7	.010
23		252	.012
30		7	.010
31		7	.004
32		252	.012
33		7	.040
34		252	.012
40		252	.012
41		7	.010
42		252	.012
43		253	.035
44		252	.030
45		7	.030
53		252	.012
61		252	.012
70		7	.018
73		7	.040
80		7	.018
100		7	.050
101		7	.010
104		9	.015
110		7	.025
115		7	.040
120		252	.030
123		252	.018
131		7	.010
132		7	.050
140		7	.015
141		7	.025
150		7	.018
153		253	.018
180		9	.015
181		252	.020
190		252	.012
200		252	.012
211		7	.007
221		7	.070
252		252	.025
255		7	.000

Standards Specific to Architectural Projects

1. Drawings scales are to be as follows:
   a. LTScale=1
   b. PSLTScale=1=on
   c. Precision=1/8″
2. All plans (i.e. floor plan, reflected ceiling plan, foundation plan, etc.) to be drawn in model. Space and tabs used to create multiple sheets for plotting.
3. The Layer manager shall be used to save and restore layer states for both model and paper space.
4. Grid Snap - 1/16″ scale to 3/8″ scale drawings to be drawn with a maximum snap of 1″. ½″ scale to 3″ scale drawings to be drawn with a maximum snap of 1/8″.
5. Dimensions shall be associative DIMASSOC=1. Dimensions shall not be forced without prior approval from the CAD Administrator
6. Dimstyles have been established in the "stdarch2004.dwt" file. Dimstyles are to be used as defined and are not to be modified under any circumstances.
7. Dimension Round-off:
   a. 3/8″ scale and less round off to 1″
   b. ½″ scale to 3″ scale round off to 1/8″
8. Leaders are to be curved for Architecture drawings and straight leaders are to be used in Landscape drawings.
9. All objects are to be bylayer.
10. Polylines are to be used for solid shading of existing walls on floor plans and all walls on reflected ceiling plans.
11. Multiline text shall be used for all notes.
12. Fractions to be diagonal stacked when used in conjunction with a whole number (ie. 3½″) and not stacked when used as a stand alone fraction (3/4″). The text size of diagonal stacked fractions are to be 75%. The text size of non stacked fractions are to be 100%.
13. Architxt font is to be used for all drawings
14. Bold font is to be used for all drawings titles
15. Text heights to be as defined in the attached tables.
16. Drawings sheets shall be numbered sequentially using the traditional numbering system (i.e. A-1, A-2, A-3). Drawing sheets shall not be numbered using the ConDoc system (i.e. A1.01, A1.02, A2.01, A2.02). This applies to all engineering disciplines within a set of drawings.

Architectural and Landscaping Text Fonts and Heights

	TEXT HEIGHTS											
Drawing Scale	1/16"	3/32"	1/8"	3/16"	1/4"	3/8"	1/2"	3/4"	1"	1 1/2"	3"	Paper Space
Notes (Architxt)	16"	10 2/3"	8"	5 1/3"	4"	2 2/3"	2"	1 1/3"	1"	2/3"	1/3"	1/12"
Room Names (Architxt)	24"	16"	12"	8"	6"	4"	3"	2"	1 1/2"	1"	1/2"	1/8"
Small Titles (Bold)	48"	32"	24"	16"	12"	8"	6"	4"	3"	2"	1"	1/4"
Large Titles (Bold)	64"	42 2/3"	32"	21 1/3"	16"	10 2/3"	8"	5 1/3"	4"	2 2/3"	1 1/3"	1/3"
Title Polyline	8"	5 1/3"	4"	2 2/3"	2"	1 1/3"	1"	2/3"	1/2"	1/3"	1/6"	1/24"
Dimstyle	ARCH 192	ARCH 128	ARCH 96	ARCH 64	ARCH 48	ARCH 32	ARCH 24	ARCH 16	ARCH 12	ARCH 8	ARCH 4	ARCH 1

	TEXT HEIGHTS											
Drawing Scale	1"=10'	1"=20'	1"=30'	1"=40'	1"=50'	1"=60'						Paper Space
Notes (Architxt)	10"	20"	30"	40"	50"	60"						1/12"
Room Names (Architxt)	15"	30"	45"	60"	75"	90"						1/8"
Small Titles (Bold)	30"	60"	90"	120"	150"	180"						1/4"
Large Titles (Bold)	40"	80"	120"	160"	200"	240"						1/3"
Title Polyline	5"	10"	25"	20"	25"	30"						1/24"
Dimstyle	ARCH 120	ARCH 240	ARCH 360	ARCH 480	ARCH 600	ARCH 720						ARCH 1

Architectural and Landscaping Line Weight Chart

LINE INFORMATION

Color	Lineweight (mm)	Virtual Pen	Screening	REMN Color
Red	0.3000	7	100%	14
Yellow	0.4000	7	100%	53
Green	0.6000	7	100%	83
Cyan	0.5000	7	100%	135
Blue	0.8000	7	100%	153
Magenta	0.3500	7	100%	213
White	0.3500	7	100%	N/A
8	0.3500	253	20%	251
9	0.3500	7	100%	252
11	0.3000	7	100%	15
31	0.2500	7	100%	33
254	0.2500	254	10%	253
171	1.0000	7	100%	173